

BY584

HIGH VOLTAGE SOFT-RECOVERY RECTIFIER DIODE

PRV : 1800 Volts

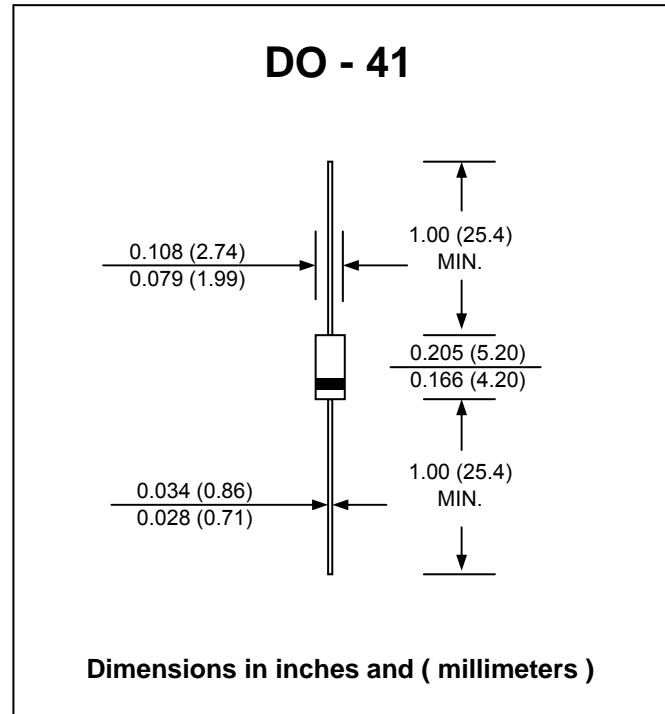
I_{F(AV)} : 100 mA

FEATURES :

- * Glass passivated junction chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.339 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1800	V
Maximum Working Reverse Voltage	V _{RW}	1500	V
Maximum Non-Repetitive Peak Reverse Voltage	V _{RSM}	1800	V
Maximum Average Forward Current (Note 1)	I _{F(AV)}	85	mA
Maximum Non-Repetitive Peak Forward Surge Current	I _{FSM}	5.0	A
Maximum Repetitive Peak Forward Current	I _{FRM}	800	mA
Maximum Forward Voltage at 100 mA , T _j =T _j max.	V _F	8.5	V
Maximum Reverse Current at Reverse Voltage	I _R	3.0	µA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	0.2	µs
Thermal Resistance - Junction to Ambient	R _{θJA}	155	K / W
Junction Temperature Range	T _J	- 65 to + 120	°C
Storage Temperature Range	T _{STG}	- 65 to + 120	°C

Notes :

- (1) Ttp = 25 °C, Lead Length 10 mm.
- (2) Measured with I_F = 100 mA, to V_R ≥ 100V

RATING AND CHARACTERISTIC CURVES (BY584)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC

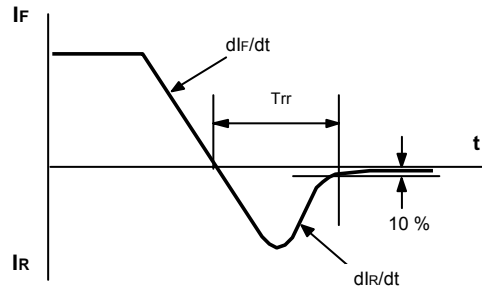


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

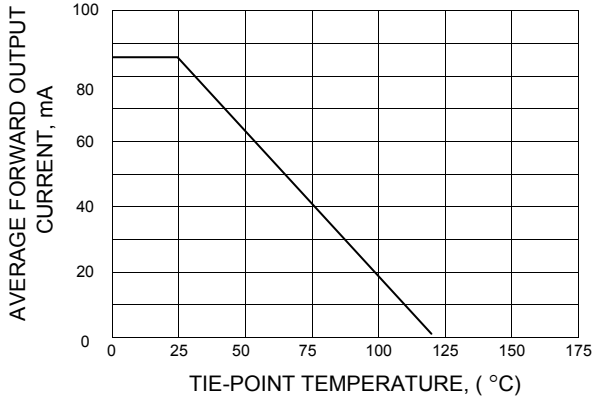


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

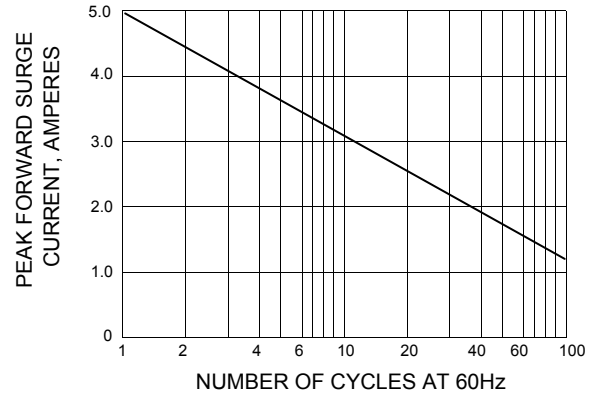


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

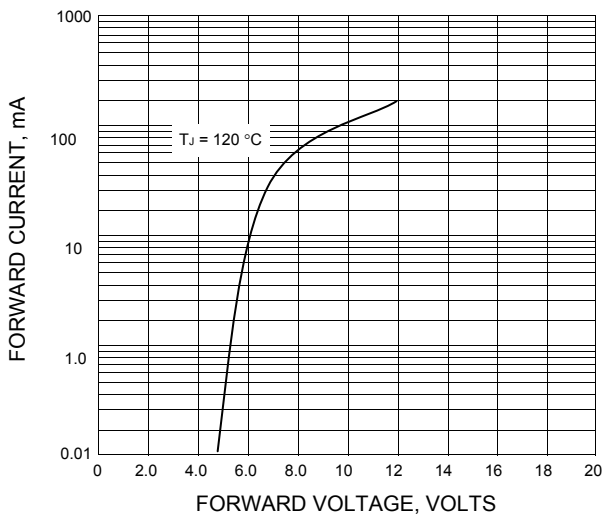


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

